

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims**

1-25. (cancelled)

26. (withdrawn) A method for manufacturing a catheter shaft, comprising the steps of:  
providing a first polymer blend having about 80 to about 95 weight % polyoxymethylene and about 5 to about 20 weight % polyether polyester;

providing a second polymer blend having about 20 to about 50 weight % polyoxymethylene and about 50 to about 80 weight % polyether polyester; and

providing a third polymer blend having about 5 to about 20 weight % polyoxymethylene and about 80 to about 95 weight % polyether polyester;

extruding the first polymer blend to define a first shaft member;

extruding the second polymer blend to define a second shaft member;

extruding the third polymer blend to define a third shaft member; and

coupling the first shaft member, second shaft member, and third shaft member to define a catheter shaft.

27. (withdrawn) A method for manufacturing a catheter shaft, comprising the steps of:

providing a first quantity of polyoxymethylene;

providing a second quantity of polyether polyester;

co-extruding the first quantity of polyoxymethylene with the second quantity of polyether polyester to define a proximal shaft portion having about 80 to about 95 weight % polyoxymethylene and about 5 to about 20 weight % polyether polyester, an intermediate shaft portion having about 20 to about 50 weight % polyoxymethylene and about 50 to about 80 weight % polyether polyester, and a distal shaft portion having about 5 to about 20 weight % polyoxymethylene and about 80 to about 95 weight % polyether polyester.

28. (previously presented) A catheter shaft, including a polymer blend shaft, comprising:

a proximal portion having about 80 to about 95 weight % polyoxymethylene homogeneously blended with about 5 to about 20 weight % polyether polyester;

an intermediate portion coupled to the proximal portion, the intermediate portion having about 20 to about 50 weight % polyoxymethylene and about 50 to about 80 weight % polyether polyester and a uniform wall thickness; and

a distal portion coupled to the intermediate portion, the distal portion having about 5 to about 20 weight % polyoxymethylene and about 80 to about 95 weight % polyether polyester.

29. (previously presented) A catheter shaft, comprising:

an inner layer;

a support member disposed over the inner layer; and

an outer layer disposed over the inner layer, the outer layer including a proximal portion having about 80 to about 95 weight % polyoxymethylene homogeneously blended with about 5 to about 20 weight % polyether polyester, an intermediate portion having about 20 to about 50 weight % polyoxymethylene and about 50 to about 80 weight % polyether polyester and having a uniform wall thickness, and a distal portion having about 5 to about 20 weight % polyoxymethylene and about 80 to about 95 weight % polyether polyester, wherein the intermediate portion is disposed between the proximal portion and the distal portion.

30. (previously presented) The catheter shaft according to claim 29, wherein the inner layer comprises polytetrafluoroethylene.

31. (previously presented) The catheter shaft according to claim 29, wherein the inner layer comprises high-density polyethylene.

32. (previously presented) The catheter shaft according to claim 29, wherein the support member includes a braid.

33. (previously presented) The catheter shaft according to claim 29, wherein the support member includes a coil.

34. (previously presented) The catheter shaft according to claim 29, wherein the inner layer defines a guidewire lumen extending therethrough.

35. (previously presented) The catheter shaft according to claim 29, wherein an inflation lumen is defined between the inner layer and the outer layer.

36. (previously presented) The catheter shaft according to claim 29, further comprising a balloon coupled to the catheter shaft.

37. (previously presented) The catheter shaft according to claim 29, further comprising a distal tip coupled to and disposed distally of the inner layer, outer layer, and support member.

38. (previously presented) The catheter shaft according to claim 37, wherein the distal tip is comprised of polyether polyester.

39. (previously presented) The catheter shaft according to claim 28, further comprising an inner polytetrafluoroethylene tubular member disposed within the polymer blend shaft.

40. (previously presented) The catheter shaft according to claim 39, further comprising a braided metallic support member disposed between the inner polytetrafluoroethylene tubular member and the polymer blend shaft.

41. (previously presented) The catheter shaft according to claim 28, wherein the proximal portion, intermediate portion and distal portion define a total shaft length and the proximal portion is about 60 to about 90% of the total length, the intermediate portion is about 15 to about 20% of the total length, and the distal portion is about 2 to about 7% of the total length.

42. (previously presented) The catheter shaft according to claim 28, further comprising a distal tip coupled to the distal portion of the catheter shaft.

43. (previously presented) The catheter shaft according to claim 42, wherein the distal tip is comprised of polyether polyester.